PRECIPITATION.

The average precipitation for California for February with departures from the normal is as follows:

Year.	Mean.	Departure.	Year.	Mean.	Departure.
	Inches.	*Inches.*		*Inches.*	*Inches.*
1897	5.85	+1.44	1905	4.24	−0.17
1898	2.95	−1.46	1906	4.88	+ .47
1899	.45	−3.96	1907	4.14	− .27
1900	.94	−3.47	1908	3.99	− .42
1901	6.03	+1.62	1909	8.00	+3.59
1902	8.14	+3.73	1910	2.43	−1.98
1903	1.76	−2.65	1911	3.33	−1.08
1904	7.91	+3.50	1912	.75	−3.66

The greatest monthly precipitation was at Weitchpec, 18.16 inches, or nearly 5 inches more than the heaviest monthly amount reported during February, 1911. At 84 stations there was no rain during the month.

The rain was not well distributed geographically, and, as has been emphasized above, was light in amount and poorly distributed as to frequency.

SNOWFALL IN THE MOUNTAINS.

No snow fell during the latter half of the month, and there was only a light fall during the first half. At the close of the month the snow cover was less deep and less extensive than during any previous February of record. The run-off was light and all streams were unusually low. The water supply was inadequate, and at many places power companies had to resort to auxiliary plants. There was general apprehension of a scarcity of water during the spring and summer months; but fortunately the first week in March has been marked by generous and general rain.

SPECIAL COMPARATIVE REPORTS.

Summit.—The following table shows depth of snow on ground at Summit on several dates in February for a number of years:

	Feb. 1.	Feb. 14.	Feb. 28.
	Inches.	*Inches.*	*Inches.*
1907	137	95	88
1908	88	115	74
1909	172	224	213
1910	76	70	72
1911	228	240	215
1912	38	27	23

SUNSHINE.

The following table gives the total hours of sunshine and percentages of possible:

Stations.	Hours.	Per cent of possible.	Stations.	Hours.	Per cent of possible.
Eureka	89	29	Sacramento	186	60
Fresno	257	82	San Diego	246	77
Los Angeles	260	81	San Francisco	171	54
Mount Tamalpais	146	47	San Jose	211	67
Red Bluff	155	50	San Luis Obispo	215	68

There was more sunshine during the current February than during February last year.

NOTES ON THE RIVERS OF THE SACRAMENTO AND SAN JOAQUIN WATERSHEDS DURING FEBRUARY, 1912.

By N. R. TAYLOR, Local Forecaster.

The Sacramento watershed.—The dry period from the 13th to the close of the month resulted in a gradual diminution of the run-off of all streams in this watershed. At no time was there sufficient rainfall to appreciably increase stream flow in any part of the Sacramento Valley.

At Red Bluff the Sacramento River averaged 3.4 feet, which equals the previous low-water record of February, 1900. At all other points streams were much lower than they have ever been before in the corresponding month. The following data from selected points in the Sacramento drainage basin show the normal stages and the departures from the normal: Red Bluff, on the Sacramento, normal for 13 years 8.7 feet, departure −5.3 feet; Colusa, on the Sacramento, normal for 6 years 16.3 feet, departure −7.7 feet; Sacramento City, on the Sacramento, normal for 13 years 19.5 feet, departure −9.7 feet; Folsom, on the American, normal for 6 years 5.7 feet, departure −2.7 feet; Oroville, on the Feather, normal for 6 years 5.9 feet, departure −3.4 feet; Marysville, on the Yuba, normal for 6 years 10.6 feet, departure −3.5 feet.

The San Joaquin watershed.—All streams in this watershed remained practically stationary at extreme low-water stages. In most cases they averaged from 0.1 to 0.5 of a foot below that of the preceding month. The rainfall, like that of the Sacramento watershed, was markedly deficient, and there was an unusual scarcity of snow throughout the mountains.

All streams in the drainage basin of the San Joaquin will probably be unusually low during the coming low-water season, especially in that part lying above the mouth of the Merced River; and it is quite unlikely that a sufficient amount of snow will accumulate in the mountains from now on to cause the usual June freshets.

WEATHER AT FRESNO, CAL., DURING FEBRUARY, 1912.

By Mr. W. E. BONNETT, Local Forecaster.

No rain in measurable amount fell during the month, and it was the driest February of the last 25 years, although several others have had very small amounts. The drought of the month is not so important in itself, but the cumulative effects of the prolonged dry season are beginning to show in many ways. Grain is beginning to turn yellow, the foothills are as parched and dry as they would be in August, and cattle and sheep men are buying feed for their herds and flocks. Plowing in the heavier soils is practically impossible, and general farm work is being interfered with. Owing to the prospect for a considerable shortage in irrigation water for the late summer, the new acreage planted to trees and vines will probably be somewhat smaller than in former years. Mature trees and vines in most places will not suffer from the lack of water, but those newly planted will need frequent irrigation, and a great many pumping plants are being installed in vineyards and orchards as a measure of safety. The total rainfall for the season at the end of February is 2.05 inches. No other season in the last 25 years has had so little.

NOTE ON THE WEATHER AT POINT REYES LIGHT, CAL., DURING FEBRUARY, 1912.

By Mr. JAS. JONES, Observer.

On the 20th a northwest gale began, which continued until the 24th. The maximum velocity of 88 miles per hour attained on the 23d was the highest velocity from the northwest ever recorded here during the winter season and the highest from any direction for the month of February since 1902. The total wind movement for the three days, 21st, 22d, and 23d, was 3,725 miles, an average of *51.7 miles per hour for the 72 consecutive hours.*